The Camphor Tree and Camphor Language of Johore.

BY H. LAKE AND H. J. KELSALL.

The Bornean Camphor, Kapur Barus, is an important product of the islands of Borneo and Sumatra and although for some time time it has been known that the tree producing it (Dryobalanops aromatica, Gaertn) is a native of the Indau district of Johore, the fact has not been recorded in any botanical work. During the recent expedition across Johore, the account of which is also published in this Journal, Messrs. Lake and Kelsall not only obtained specimens of the tree, but collected also as much as possible of the Camphor language used by the Jakuns while on the search for the camphor. The following notes on the history of the product may be of interest to, and may serve as an introduction to, the list of vocabulary.

Dryobalanops aromatica, Gaertn, D. camphora Colebr is a lofty tree belonging to the order Dipterocarpeæ, an order well known as producing most of the resins known as Damars. The stem is about $3\frac{1}{2}$ feet in diameter at the base, and from 100 to 150 feet in height, straight and unbranched till near the top, where it forms a large crown of branches; at the base it often throws out large buttresses. The bark is rough and of a dark brown colour, and is used for making walls of huts, etc. The wood is dark brown, very resinous and strongly aromatic. It is much used in Borneo for building. Like most Dipterocarps it appears to be

a tree of very slow growth.

The tree is a native of North Borneo, Labuan, North-West Sumatra, and on the Madek and Kahang rivers in Johore, but there is no record of it from any other part of the Malay Peninsula. It yields two distinct products. Borneo camphor (Kapur barus), and Camphor oil (S'mp'loh kapur in the camphor language.) Minyak Kapur, in Malay Barus, is the name of a locality in Sumatra where for many centuries the camphor has been obtained.

The earliest mention of camphor known occurs in the poems of Imru-l-kais, an Arabian prince who lived in Hadramant, by the Gulf of Aden, in the sixth century. It was then evidently very rare, and highly prized as a perfume. It seems quite clear that the Bornean camphor was known before the Chinese camphor, the product of the camphor Laurel (Cinnamomum camphora). The Mediæval Arabian writers state that the best camphor came from Fansur, also called Kansúr or Kaisúr, a place visited by Marco Polo. Yule believes this to be the same as Barus in Western Sumatra. Garcia in the Historia Aromatum (1593) gives a long and interesting account of it, of a portion of which the following is a translation. "Camphor is truly a noble medicine, of which there are two kinds, viz., camphor of Borneo and that which is brought from China. Borneo camphor has never yet penetrated to our regions, at least if it is here I have not happened to see it, nor is that strange, since a pound of it is worth as much as a hundred pounds of that which is brought from China. Of the Borneo camphor, which is as big as a millet seed or a little larger, the greater part is worthless. Gentiles, Baneanes (Hindus), and Arabs who sell it say it consists of four kinds; for they classify it into head, breast, legs and feet.* That of the head is worth 80 pardans a pound. (A pardan is an Indian gold coin worth 10 Castilian Rials), that of the breast in worth 20, of the legs 12; of the feet, 4 or, at most, 5. Some, more particular, have four copper instruments perforated with holes of different sizes, (like those which pearldealers have) and rass the camphor through them. Those pieces which pass through the instrument with the larger holes have a certain value; those which are passed through the one with medium holes another; and those which pass through smaller holes another value. But the Baneanes are so clever at distinguishing them, that when mixed they can tell one camphor from another, nor can any one be found who can easily deceive them. Much of this camphor is produced in Borneo, Bairres, Sumatra, and Pacen. But the names of the places in which Serapion and Avicenna say it is produced for the most part are corrupt. what Serapion calls Pansar, is Pacen in Sumatra; what Avicenna calls Alcuz may be Sunda, which is an island near Malacca."

^{*} See Marsden's Sumatra, p. 121.

(Clusius appends a note to this saying, "Copies of the last edition do not give Alcuz, but Alkansuri and Ariagie, then Alczeid and Alescek." Alkansuri is evidently the kansur alluded to above. And what Serapion says came from the region of Calca is corrupt, and he should have said from Malacca, since it is produced

in Bairros, near Malacca.)

"Camphorisa gum (not the pith or heart of wood, as Avicenna and some others think) which falling into the pithchamber of the wood is extracted thence or exudes from the cracks. I saw in a table of Camphor wood at a certain Apothecary's, and in a piece of wood as thick as the thigh presented to me by Governor John Crasto, and again in a tablet a span broad at a Merchant's. I would not, however, deny that it may sometimes be deposited in the hollow of a tree. It is told me as a fact that it is the custom that when any one who goes out to collect it has filled his gourd, if any other stronger person sees him with the gourd, he can kill him with impunity and take away the gourd, fortune assisting him in this. That which is brought from Borneo is usually mixed with small bits of stone or some kind of gum called Chamderros, much like raw sugar or sawdust. But this defect is easily detected; I know no other method of adulteration. For if sometimes it is seen to be spotted with red or blackish dots, that is due to treatment with dirty or impure hands or they may be caused by moisture. But this defect is easily remedied by the Indians. If it is tied up in a cloth and dipped in warm water to which soap and lime-juice has been added and then carefully dried in the shade it becomes very white, the weight not being altered. I saw this done by a Hindu friend who intrusted me with the secret. * * * What they say as to all kinds of animals flying together to its shade to escape the fiercer beasts is fabulous. Nor is it what some, following Serapion, write less so, namely, that it is an omen of larger yields when the sky glitters with frequent lightning or echoes with constant thunder. For as the island of Sumatra, which some think to be Taprobane, and the adjacent regions are near the equinoctial line, it follows that they are subject to constant thunderstorms and for the same cause have storms or slight showers every day; so camphor ought to be abundant every year. From which it is clear that the thunder is neither the cause nor indication of a larger supply of camphor.

"Andreas of Belluma in his Dictionary writes that the Arabs distill camphor water from the camphor tree About this liquid I inquired much among doctors and merchants but could find no one who had seen it, whence I easily conjecture that he in des-

cribing it made a mistake.*

"Ruellin and Mathiolus following him and both after Serapion write that this camphor excelled all others in goodness which was called Riachina after a certain king Rihah (who first discovered the method of whitening it). But I cannot see how that since the Indian kings were very powerful, they should have any need to turn their attention to

the showing off of their trade products."

Garcia then proceeds to discuss whether it is hot or cold. He imagined at first that it was hot, but finding that it was cooling when used for opthalmia and inflammation of the eyes, concludes that it is of a cold nature. Avicenna states that camphor makes people wakeful, but how can that be since Avicenna himself says it is of a cold nature, and cold things usually send one to sleep! But he concludes that by taking a little sleep may be produced. At the same time, however, if anyone smells it often enough and applies it to his nostrils it dries up the brain and keeps him awake. Such are the quaint ideas as to drugs of exactly three centuries ago.

Borneo camphor was evidently known long before that of the Chinese Camphor Laurel, and was always very highly prized and to this day it is too expensive for the European market. It is eagerly bought by the Chinese, Siamese, and Japanese for

incense, embalming, and medicine.

According to the account given by the Jakuns the camphor occurs in cracks in the interior of the tree, which has to be split in pieces and the wood carefully scraped. The camphor thus obtained is washed free from fragments of wood and sap, and sold to the Chinese at Kwala Indau. The price varies according to quality from fifteen to forty dollars a katti.

Camphor oil is a different product, obtained by making a hole in the side of a tree and burning it in the same manner as is adopted for obtaining Minyak Kruing and other wood oils. It is also, in Borneo and Sumatra at least, found in hollows and splits

in the wood.

^{*} Doubtless he was alluding to Camphor oil.

A very small percentage of camphor trees contain any camphor. The hunters first test the tree by making a deep cut in the bark if there is a faint odour of camphor the tree is cut down and thoroughly examined but not otherwise.

H. N. R.

The Camphor Language of Johore.

The chief interest attaching to the Kapur Barus in Johor lies in the superstitions connected with the collection of the camphor by the natives or orang Hulu (Jakuns of the Malays).

Amongst these superstitions the most important is the use of a special language, the subject of the present paper, which has been the means of preserving some remnants of the aboriginal dialects of this part of the Malay Peninsula. This language is called by the orang Hulu "Pantang Kapur," "Pantang "means forbidden or tabooed, and in this case refers to the fact that in searching for the camphor the use of the ordinary Malay language is "pantang," or forbidden. In addition to this there are restriction as to food, etc.,

This Camphor language is first referred to by Mr. Logan in his account of the aboriginal tribes of the Malay Peninsula (I. A. Journal, vol. 1, p. 293) and he gives a list of eighty words, thirty-three of which are Malay or derived from Malay.

In No 1 of this journal will be found some notes on the same subject by Miklucho-Macklay, and in No 3 Mr. Hervey, in an account of his trip to Gunong Blumut, refers to the same subject and gives a list of words collected by him which he compares with Mr. Logan's list. In No 8 of this journal Mr. Hervey, in his account of a trip up the Indau and its tributaries, again refers to the camphor language and discusses its connection with the aboriginal dialects of the Malay Peninsula.

The Jakuns believe that there is a "bisan," or spirit, which presides over the camphor trees and without propitiating this spirit it is impossible to obtain the camphor. This "bisan" makes at night a shrill noise, and when this sound is heard it is a sure sign that there are camphor trees near at hand. "bisan" is really one of the Cicadas which are so numerous in the Malayan jungles).

When hunting for camphor the natives always throw a portion of their food out into the jungle before eating as an offer-

ing to the "bisan"

No prayers are offered up, but all food must be eaten dry, i. e., without sumbul, or stewed fish, or vegetables. Salt must not be pounded fine; if it is eaten fine the camphor when found will be in fine grains; but if eaten coarse the grains of camphor will be large. In rainy weather the cry of the 'bisan' is not heard. At certain seasons regular parties of Jakuns, and sometimes Malays, go into the jungle to search for camphor and they remain there as long as three or four months at a time. Not only must the men who go into the jungle to search for the camphor speak the "Pantang Kapur," but also the men and women left at home in the Kampongs.

The camphor occurs in the form of small grains deposited in the cracks in the interior of the trunk of the tree. Camphor is only found in the older trees, and not in all of these, and to obtain it the tree must be cut down and split up. are certain signs which indicate when a tree contains camphor. one of which is the smell emitted from the wood when chipped. A man who is skilled in detecting the presence of camphor is called Penghulu Kapur. The camphor when taken away from the tree is washed and all chips of wood and dirt carefully removed and it is then sold to Chinese traders at Kwala Indau at prices varying according to the quality from \$15 to \$40 per katti.

The Camphor language consists in great part of words which are either Malay or of Malay origin, but contains, as above mentioned, a large number of words which are not Malay but which are presumably remnants of the original Jakun dialects which are apparently almost obsolete otherwise in the Indau and

Sembrong districts of Johor.